Editorial

Genes - they never go out of fashion!

Genetics in general and more specifically ophthalmic genetics are areas that ophthalmologists tend not to focus too much on – during training and in practice. Undergraduate medical training and ophthalmology residency in India traditionally place more emphasis on diagnostic and surgical skills rather than other areas such as genetic analysis and genetic counseling. This is surprising considering ophthalmology has played a significant role in discovering the impact of genetics in medicine: It was retinoblastoma which was the first human cancer gene to be cloned; Leber hereditary optic neuropathy was the first mitochondrial disorder to be described in detail, and finally it was X-linked red-green color deficiency which was the first X-linked disorder to be described![1] In the past couple of decades, however, the impact of genetic diseases in ophthalmology has made it imperative that all ophthalmologists have at least a working knowledge of genetic diseases, their clinical manifestation, and genetic counseling. Molecular analysis and laboratory technology have also evolved rapidly to ensure that genetic analysis is far more accessible than it was say, a decade or two ago. Keeping this in mind, it has been a conscious effort by the Indian Journal of Ophthalmology to keep its readers abreast of the latest in ophthalmic genetics by the way of increasing the number of accepted manuscripts that deal with ophthalmic genetics. This issue features articles that discuss new findings on the genetics at work behind the pathology of myopia, congenital cataract, and congenital hereditary endothelial dystrophy. This issue also features a guest editorial by Dr. Takeshi Iwata, Director of National Institute of Sensory Organs, Tokyo Medical Center, and a former National Eye Institute research fellow.

Far too many ophthalmic conditions and systemic illnesses that have ophthalmic manifestations have a genetic etiology behind them. This has necessitated the birth and development of ophthalmic genetics as an independent clinical specialty. Gene therapy too has yielded gratifying initial results has the potential to change the way we treat hereditary causes of visual impairment.[2] Furthermore, technological advances in the field of molecular diagnostics have also paved the way for better understanding of genotypic-phenotypic correlations. With so much happening and much more that is about to unfold, the future does hold exciting things in store for us, ophthalmologists, and our patients.

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